November 27, 1981

Memo to File:

RE: Sunshine Mining Company
Burgin Project
ACT/049/009
Utah County, Utah

On November 13, 1981, Division representatives Susan Linner, Reclamation Biologist, Thomas Tetting, Engineering Geologist, and Thomas Portle, Reclamation Soil Specialist, visited the above mentioned minesite. They were accompanied by Sunshine Mining Company officials William Booth, Environmental Officer, and Carl Johnson, Project Engineer. The purpose of the visit was to discuss problem areas identified in the review of Notice of Intention to Commence Mining Operations.

Drainage Control

One concern brought up in the review in M-3(1)(e) was related to drainage impoundment resulting from the existing railroad right-of-way and to assess the likelihood of any discharges from this area. The operator was at this time informed of the role of State Health in the NPDES process in the event a discharge would ever be anticipated. However, the opinion of all concerned at this time was that it would be unlikely that water would exit the area due to a large containment volume and a minimal surface area affected.

Topsoil

Topsoil calculations will be provided by the operator to address the deficiencies identified in the review of the Notice of Intention. Another concern was the placement of topsoil materials. These materials are placed next to the waste rock area and above the waste rock in one location. However, the operator indicated that space consideration and limited topsoil storage alternatives to the current area. Concerns that topsoil would be degraded because of this contact arose both during the review process and during the meeting. This time Division representatives committed to working with Sunshine to develop a plan seeking to identify any adverse effects should they occur as a result of this storage method. Test plots will be set up utilizing amended and unamended fertilizer treatments in both soils and waste rock conditions, lime treatment in low pH waste rock and possibly mulch. By evaluating plant performance and taking subsequent soil analysis the Division will be able to determine if additional measures are necessary (i.e., that detrimental conditions exist and should be mitigated). This approach will also address the variance request under M-10(12) where Sunshine requests not to be required to cover the area with topsoil by determining if soil waste rock area by waste rock area can be adequately reclaimed without topsoil by the utilization of soil amendments.

Memo to File November 27, 1981 ACT/049/009 Page 2

Possible bonding problem will warrent further attention. The company desired to be self-bonding but was informed this is not a readily accessible option. Kennecott utilizes a road through the mine plan area for access by right of an easement. Responsibility for reclamation of this road was discussed without conclusion.

THOMAS L. PORTLE TERMINATION SOILS SPECIALIST

TLP/te:

cc: Carl Johnson, Sunshine